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Application/Control Number: 10/770,602 Page 2

Art Unit: 2857

1. The information disclosure statement (IDS) submitted on 02/04/04 has been considered. See the attached initialed copy.

2. The following is an examiner's statement of reasons for allowance:

The prior art fails to teach the invention as claimed in independent claim 1 requiring in the method the combination as a whole of the specified data types and interrelationships there between for determining the data for forming from a grouping of all coherence values a coherence cube showing the local similarities where mathematical analysis includes application of a generalized principal component analysis operation at the specified data operation stage. The various prior art is cited of background interest but all lack such a mathematical analysis in the context of the seismic data analysis as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald McElheny, Jr. whose telephone number is 571-272-2218. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoff Marc, can be reached on weekdays at telephone number 571-272-

Application/Control Number: 10/770,602

Art Unit: 2857

2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald E. McElheny, Jr. Primary Examiner Art Unit 2857

Page 3